

The improvements contemplated by General de Nansouty comprise an entirely new and much more solid and durable structure at the very summit of the mountain. A few generous friends of science have come to his aid and placed in his hands the means of carrying out the execution of his enterprise. M. Bischoffsheim gives 15,000 francs, the Minister of Public Instruction and the Minister of Public Works each 10,000 francs, the Academy of Sciences 1,200 francs; and large sums have been given by various other societies and individuals while many smaller subscriptions, down to one franc, have been placed at the General's disposal. There is every reason to believe, that though the work will be much more costly than originally expected, it will be thoroughly and promptly completed.

Our illustration (Fig. 4) shows the new observatory as it will appear when the works are completed; it is at present half built. To the right is seen, perched on a platform, the shelter for the instruments of observation. In the centre is the dwelling-house, the arrangements of which will be seen in the plan, Fig. 5. To the left is the lightning-rod, intended to protect the structure from the lightning which so frequently strikes the summit of the Pic. This lightning-rod, with its cable, which plunges 500 metres lower down in Lak Oncet, has cost 2,800 francs. The excavation of the hollow in which the structure is built has cost 2,500 francs; so much of the building as has been raised, that is one half, has cost 22,000 francs. No doubt all the necessary funds will be forthcoming; it is said that the Minister of Public Instruction will this year contribute another sum of 10,000 francs.

The example of General de Nansouty has already borne fruit in France. General Farre has installed an observatory at the foot of Infernet. In Provence a movement has been set on foot to place one on Mont Ventoux. With the fine observatory of the Puy de Dôme, France will possess an important net-work of high meteorological stations which cannot but render valuable services to a knowledge of atmospheric phenomena, and be of great practical value to national industry. Let us hope that in a very few months our own country will possess at least one of these lofty stations which the French Government, the French people, and French science think it their interest and duty to give substantial encouragement to.

GEOGRAPHICAL NOTES

At the meeting of the Geographical Society on Monday evening Sir Rutherford Alcock announced that the Earl of Dufferin had formally resigned the office of president in consequence of his appointment to the St. Petersburg embassy. Mr. Clements R. Markham read a paper on the basin of the River Helmund and the smaller basin of the Abistada Lake, in Western Afghanistan, a region which is classic ground, and is the scene of many of the ancient Persian tales related in the pages of Ferdosi. Mr. Markham gave some interesting particulars respecting the formation of the river of Ghazni, which drains the eastern half of the remarkable isolated basin of Lake Abistada, on the east side of the western Sulimani Range. He afterwards read a paper by Lieut.-General Kaye, on the mountain passes leading to the valley of Bamian, based on that officer's recollections of his visit to the region north of Kabul, nearly forty years ago, supplemented by notes made at the time. With regard to the idols of Bamian, the limit of his journey, General Kaye mentions a curious fact, viz., that between the images and at their sides, peeping over their shoulders—and some even above their heads—were many caves in the cliff-side on which they are cut, having intricate connecting approaches and galleries cut within the rock; these formed dwellings for many Bamianchis and also for some camp-followers of the British. The two papers were illustrated by the large diagram of Afghanistan which has just been constructed for the Society.

THE London Missionary Society have received letters down to October 17 from their mission at Ujiji, on Lake Tanganyika, which announce the death from apoplexy of the Rev. Mr. Thomson, the leader of the party after the Rev. Roger Price's departure. The Arabs, though well disposed, refuse to allow the missionaries to settle away from Ujiji. Mr. Hore, the scientific member of the mission, has taken several observations with the view of settling the position of Ujiji.

IN consequence of the prevailing ignorance on the subject, Mr. E. F. im Thurn, of Demerara, has begun to draw up some notes on the Indians of Guiana. In the first instalment he remarks that the main tests by which to distinguish the various tribes are language, geographical position, physical features, and customs, as expressed in their characters, habits, and legends. In applying these tests to the tribes of British Guiana he thinks it best to look first at their geographical position. British Guiana consists of three regions—the coast region nearest the sea, within that the forest region, and within that again the savannah region, which passes without break into the great savannahs of Brazil. The coast region, in the north, towards the sources of the Orinocco, is inhabited by the Warau Indians, and further south by the Arawacks, while here and there are settlements and families of the Caribisi, a term which appears to be not strictly synonymous with Caribs. The forest region is almost entirely inhabited by the Ackawois, with a very few Carabisi settlements scattered among them. The Savannah region is peopled by a large number of tribes. Beginning from the north towards the Orinocco, the chief are the Arecunas, Macusis, Wapianans, and Atorais. Further south are the Tarumas and Woioiwais, and the small remnants of the Maopityans, or Frog Indians, and the Pianoghottos. Here and there travellers report the existence of other tribes, but these Mr. im Thurn maintains to be groups of hybrids between two tribes. Of the Maopityans and the Pianoghottos nothing beyond a few details as to their peculiar personal appearance and manners is known, and of the Woioiwais only the name is known. Mr. im Thurn next dwells at some length on the linguistic peculiarities of the other tribes mentioned, excepting the Tarumas, and he afterwards describes the way in which they most probably came into the positions they now occupy.

THE statue of Captain Cook, which has been erected in the Hyde Park, Sydney, was unveiled on February 25. The ceremony, which was of an imposing character, was performed by the Governor, Sir Hercules Robinson, in the presence of the Ministry, the public bodies of the city, detachments of the naval and military forces, and upwards of 20,000 spectators.

DR. EDWIN R. HEATH, of whose proposed exploration in South America we have already made mention, left New York on November 23, and reached Pará on December 19. He was to have taken a steamer up the Madeira on the 23rd, and thence to Exaltacion or else across to Reyes, on the Beni River, where he proposed to spend some time in making collections and the necessary preparations for descending the river. He expected to obtain Greenwich time at San Antonio, the latitude and longitude of which is well established, and to work his longitudes by them until arriving at the Beni, where he intended to correct it by "lunars." With a good outfit and apparatus he was to take observations of latitude and longitude at every suitable opportunity, as also to make records of the thermometer, barometer, and boiling-points. After completing all his preparations at Reyes, and having his *balsa* properly constructed and equipped, he proposed to commit himself to the current, and take his chances of what might happen.

THE Minister of Public Instruction at Paris has received an interesting communication from Dr. Jules

Crevaux (see NATURE, vol. xix. p. 298), written on October 30 from the River Kou, an affluent of the Yary, one of the lower tributaries of the Amazon. When he last wrote he had just crossed the crest of the Tumuc-Humac range. The Rouassir, an affluent of the Kou, was at length reached, after many difficulties, on September 27, but proved to be navigable for less than 250 yards; its course then led through a marshy country, in which it was divided into numerous streams, encumbered with a virgin vegetation, which had to be cut through. The party only reached the confluence of the Kou on December 2. Here Dr. Crevaux met some members of the Roucouyenne tribe whom he had seen before, and who were journeying towards the Oyapock River, in Guiana. They took his letters and some of his collections, while a few of them undertook to remain with him and guide him to the Yary, and thence to the Paru.

At a recent meeting of the Geographical Society of Lyons, Capt. Baudot read a report on M. Duponchel's project of a railway from Algeria to the Senegal. He characterised the scheme as a dream and an illusion, and basing his remarks on his experiences gained during a long sojourn in Algeria, he enumerated the difficulties which rendered the project incapable of realisation in our time.

WE have received the first part of a new edition of Stieler's well-known Hand-Atlas, published by Perthes, of Gotha. A large number of new maps are promised; one of these, North-West Africa, is contained in the first part, and seems to us to be well up to date. It is only four years since the last edition was published, but much has happened during the interval to render a new one necessary.

A NEW Society of Geography has been established at Nancy, the head town of French Lorraine, and the first meeting took place on February 24. Another Society of Geography for Normandy has also been found at Rouen.

At a recent meeting of the Berlin African Society, the sum of 2,000 reichsmark was awarded to the well-known traveller, Herr Ad. Krause, who is now in Northern Africa, for a special tour to the Ahaggar mountain range. A further sum of 20,000 mark will be distributed amongst several other travellers shortly. In the next part of the Society's *Mittheilungen*, interesting reports just come to hand from Drs. Gerhard Rohlfs and Buchner, will be published.

IT is stated that Major Butler, of the 9th Regiment, has returned to India from Turkestan, after completing a survey of nearly 6,000 miles of the country. In the course of his explorations he visited and held a conference with the Tekké Turcoman chiefs at Kizil Arvad, which was afterwards occupied by the Russians, but from which it is said that General Lomakin has found it necessary to beat a retreat.

IN the list of observations for fixing positions on the Amazons, taken by Commander Selfridge, U.S.N., which were recently published in the *New York Herald*, we learn that by an accidental error the longitude of Pará was given as $48^{\circ} 59' 15''$, instead of $48^{\circ} 29' 15''$, and that the latter will have to undergo a correction of $50''$ for the difference between the meridians of the Rio de Janeiro Observatory and Fort Villegagnon, the distance having been erroneously calculated from the latter.

UNDER the title of "L'Amérique Equinoxiale" M. Ed. André has just commenced, in the *Tour du Monde*, a series of admirably illustrated papers on the United States of Colombia, Ecuador, and Peru, in which he travelled on a scientific mission from the French Government in 1875-6.

NOTES

FREDERICK SMITH, F.L.S., assistant-keeper of the zoological department of the British Museum, died on the 16th inst. at the age of seventy-three. Mr. Smith had devoted himself to entomology, and was one of the first living authorities on hymenopterous insects.

THE first *soirée* given at the Paris Observatory by Admiral Mouchez took place on February 21, and was very successful. More than a thousand persons belonging to influential circles visited the scientific exhibition of telephones, microphones, electric pens, Feil's new specimens of artificial gems, &c. A lecture was given by M. Wolf illustrating a new projection by electric light; the revolution of a radiometer could be observed for the first time on a screen. Admiral Mouchez had secured the services of the band of the Republican Guard, and a ball terminated the proceedings. Science seems to be somewhat more human and gay in Paris than in London; we do not think this does any harm to science, and is certainly a very effectual method of spreading an interest in it.

ENCOURAGING experiments were made at the British Museum on Tuesday night in lighting up the reading-room by means of the electric light. To-night further and more complete experiments are to be made, and we trust that as the result a considerable extension of working-hours will be possible for the hundreds who make the great room their daily workshop. A week or two ago the enterprising authorities of the Dundee public library made similar experiments with hopeful results. For such purposes there can be no question of the utility of the light, if suitable and safe arrangements could be made. The form of light used at the Museum was the modification of the Jablochkoff candle introduced by the Société Générale d'Électricité. By way of experiment the electric light has recently been introduced into the Vienna Art Exhibition at the "Künstlerhaus", and has enabled the directors to keep open their picture galleries until late at night. The experiment was a perfect success, and the new light will remain permanently established at the galleries.

THE subjects of the Croonian Lectures for this year are announced. Lecture I. will be on the physical basis of auscultation, Lecture II. on tension, Lecture III. on the rate of the heart's hypertrophy. All the lectures will be illustrated by means of physical experiments and oxyhydrogen projection. The lecturer is Dr. W. H. Stone.

ON Wednesday, March 5, Prof. Flower will give the first of his nine lectures at the College of Surgeons, on the comparative anatomy of man, in continuation of the course of last year, to be continued on Mondays, Wednesdays, and Fridays, at 4 o'clock, to March 24. The following are the heads of Prof. Flower's lectures:—Recapitulation of the best ascertained facts in connection with the subjects treated of in the last course, including the physical characters and geographical distribution of the Australian, Tasmanian, Melanesian, Papuan, Malay, and Polynesian races, with further illustrations from recent additions to the Museum; the inhabitants of the Andaman Islands, briefly touched upon last year, will next be treated of in detail, as typical examples of the Negrito race, and their osteological characters and relations to other races demonstrated from a series of skeletons and crania lately received; the Mongolian type and its various modifications, illustrated as far as the materials in the Museum permit; ethnology of Eastern and Southern Asia; the Ainos, a non-Mongolian people of Northern Japan; the Eskimos. The lectures are free to all who are interested in the subject.

A NEW society has been created at Paris for aeronautics. It is styled "Académie d'Ascensions météorologiques," and a